



University of Tennessee, Knoxville

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Spring 5-2007

### Storytelling Through Architecture

Claire Nicole Wallace  
*University of Tennessee - Knoxville*

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Claire Nicole Wallace  
*Bachelor of Architecture*

*Storytelling*

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*Framing*



petroglyph found on Signal Hill in Arizona

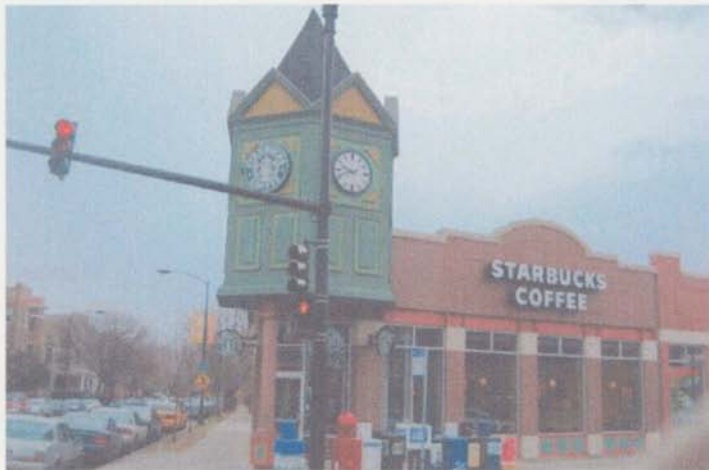
*"Visual storytelling of one kind or another has been around since cavemen were drawing on the walls."*

*- Frank Darabont*

*How can architecture serve as a catalyst for storytelling?*

*How can architecture tell the appropriate stories?*

Throughout time, people have used visual devices to capture stories. Visual storytelling displays a history of the past, an identity for the present, and a story for the future to compare and appreciate. Architecture is an ever-present form of visual storytelling. The built environment has the ability to capture the history of a place and tell that story through *space*. Architecture forms a visual, spatial link between the past, present, and future, becoming a point in the timeline of a place and culture.



'flat' architecture

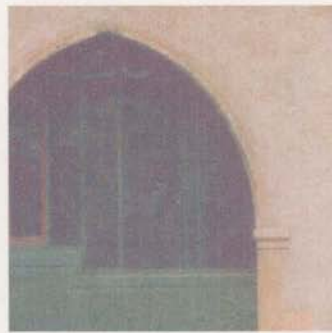
### *The Problem*

Architecture constantly tells stories, but often these narratives are one-dimensional, 'flat' representations. These stories comprise a single layer - style - a layer that tells nothing of culture, history, or pride in a place, but is instead rooted in economics and the desire to build things cheaply and quickly.

### *The Solution*

In order for visual storytelling to occur in the form of architecture, a multiple-layered language must be developed. A spatial language is needed to tell the story of a particular place. If a spatial language is developed, it is possible to tell the appropriate stories - stories of the people who inhabit or have inhabited a place, the cultural history of a site, and evolution of use, building materials, and technology.





*Precedents as Solutions*



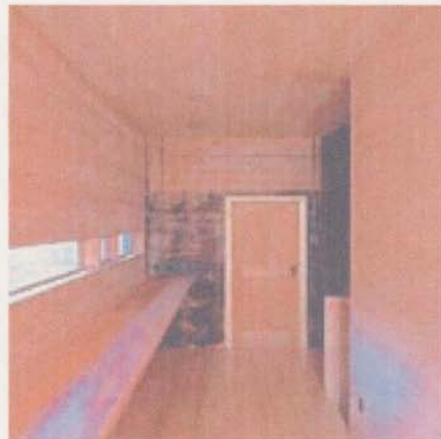
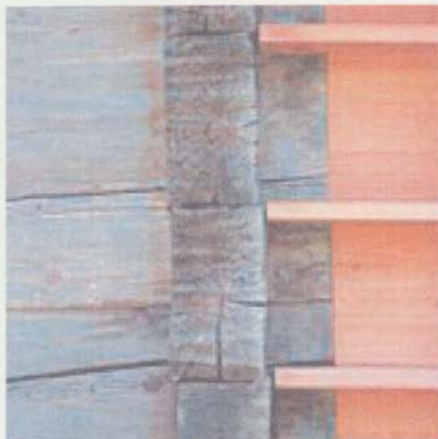
The Gugalun House - An Addition  
Peter Zumthor  
Versam, Switzerland  
1990-1994

Generations of alpine farmers have inhabited this site since the early 1700s. The original homestead - the smaller, more worn portion located on the edge of the hill, dates back to 1708. Peter Zumthor designed a new, shared roof to house both new and old components of the home. The newly designed kitchen, bathroom, and secondary spaces with larger windows follow the classical sequence of rooms found in homesteads in this area. Zumthor incorporates new ideas of structure in the addition, creating a concrete "basin" in which the wood shell of walls is inserted.



*"We aimed to design a new whole in which the old and new would be assimilated."*

*- Peter Zumthor*



*It is hard to imagine being an architect without having had experience of working on old buildings  
- let's hope it has had an influence."*

*- Peter Zumthor*

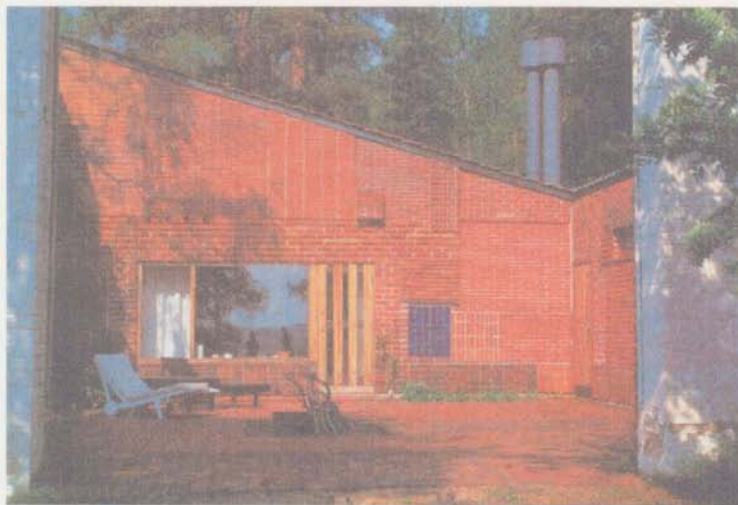


*The Stories*

mutual respect for old and new  
interweaving of old and new  
humble beginnings  
humble endings



Summer House  
Alvar Aalto  
Muuratsalo, Finland  
1953



Alvar Aalto designed his summer home as an experimental abode - a place for testing spatial and formal relationships and material selections. The L-shaped enclosed space opens up onto a courtyard, much like the 'tytä' of traditional Finnish farm houses.





*"...powerful sense of a ruin"*

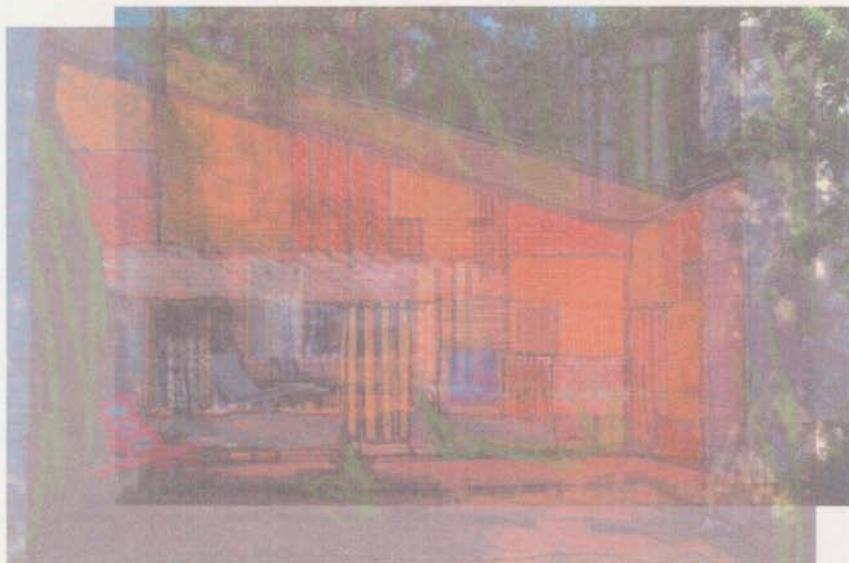
*- Michael Trencher*



*"Aalto took advantage of the ideal site conditions to incorporate a sequence of archetypal experiences and rituals: the voyage (the crossing of the water), the disembarkation, the ascension, the arrival at the settlement, and refuge in its restorative inner sanctum."*

*- Michael Trencher*





*The Stories*

layering of materials  
experimentation  
nature re-entering the building  
vernacular space



Museo di Castelvecchio  
Carlos Scarpa  
Verona, Italy  
1957-1964

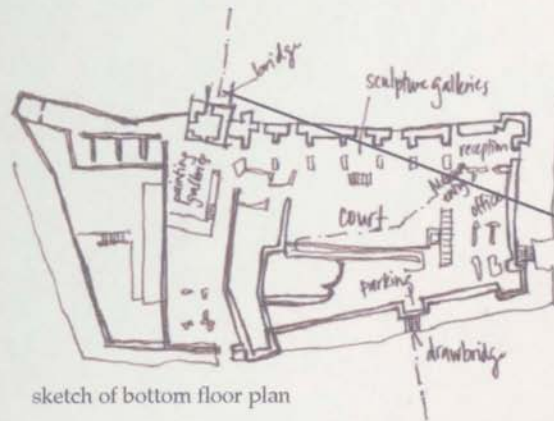


The Scaligeri family built this castle in medieval times, and soon after a medieval church was added and incorporated into the existing castle walls. Napoleon created several additions and transformed the complex into housing for his troops. In 1924, the building was restored as a museum, but was bombed in World War II. Carlos Scarpa was chosen to redesign and restore the complex in 1957.



*"What a tease it must have been for their hibernated longings to perceive your mischievous juxtapositions of seemingly incongruous materials, your mid-air crossings of never-touching beams, your cutting through a wall just to reveal its matter as multilayered strata. They must surely have taken you to their hearts."*

*- Emilio Ambasz, to Carlos Scarpa*



sketch of bottom floor plan



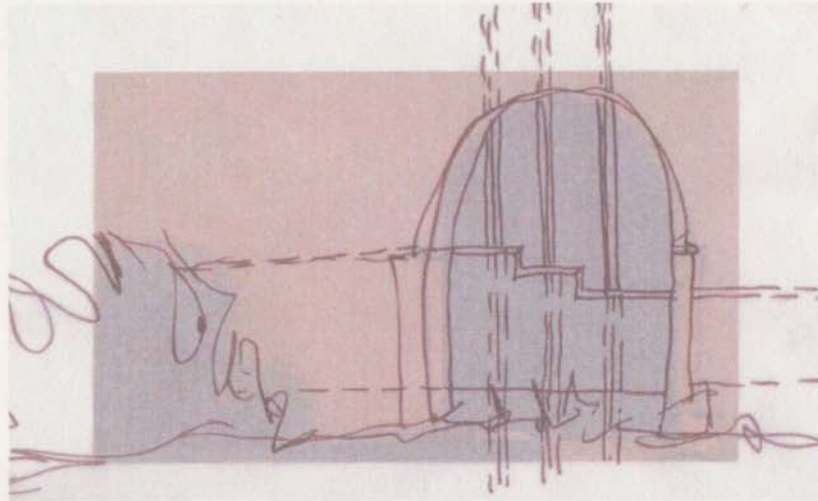
*When perusing the Castelvecchio, one may feel that "construction has been suspended midway, that objects are in the process of being made or in the process of erosion."*

*- Emilio Ambasz*

*"In your opera, the libretto is always subservient to the memorable aria; in your architecture, the parts are the whole."*

*- Emilio Ambasz, to Carlos Scarpa*





### *The Stories*

architecture as a discovery tool

overlap of old and new

hierarchy of detail

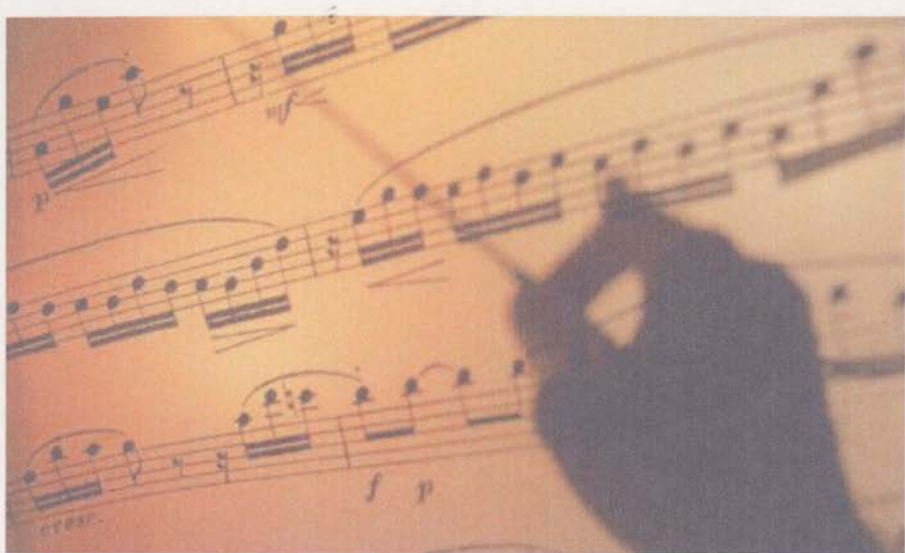
fleeting glimpses to aid in understanding



In order for buildings to tell the appropriate stories, 'accommodating architecture' must be created, that is, architecture that engages with the history of a site, respects existing conditions of a place, relates to present needs, and provides the potential for future use and adaptation. Just as Aalto's Summer House, Scarpa's Castelvechio, and Zumthor's Gugalun House invite users and visitors to touch and explore the story, it is possible to create new architecture to enhance the sense of *being* part of the story, and thus part of the past, present, and future.

*Supporting*





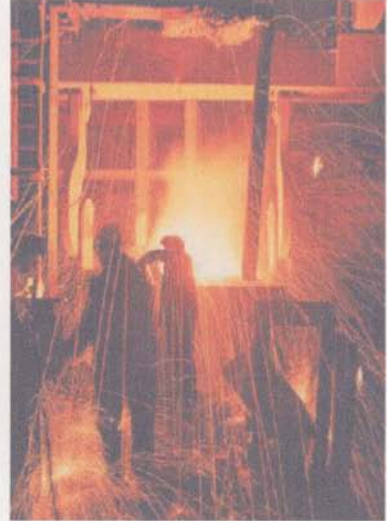
*"Architecture is music in space, as it were a frozen music."*

*- Friedrich von Schelling*



panoramic view of site

A building's site is a crucial element in the successful telling of stories. In regards to program, a site dictates the types of activities that will aid in the telling of the story of the site. In this project, an industrial site along the Knoxville South Waterfront has been selected. This area, which is soon to be transformed into a high-end residential and multiple use area, is for now a quite humble industrial zone. A number of factory buildings survive along the water's edge, several of them still in operation but clearly needing care.

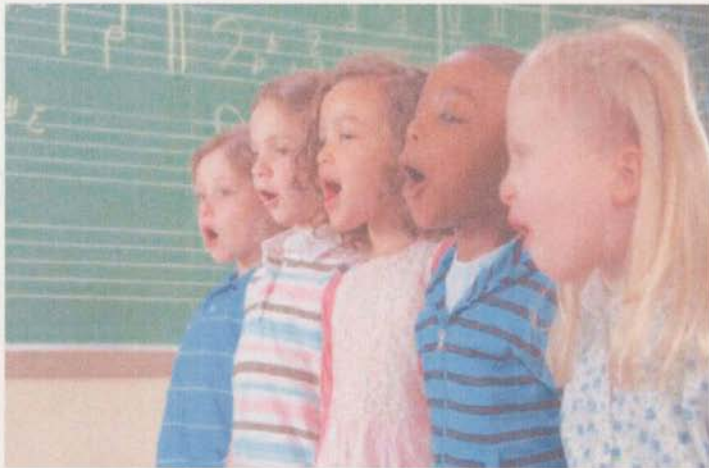


Locating a project in this zone means creating a program that will compliment existing conditions but also serve the current and future needs of the area. In the past, factories along this waterfront acted as a hub for the area. They brought members of the community together to work and produce a finished project to be sent along the river. Though some of the factories along the waterfront still operate, the majority of the land and buildings are lacking use and upkeep. A new function for the waterfront is needed. In order to capture the history of the place, however, this new function must take inspiration from the past and adapt to a new setting, new needs, new people.



The production of goods is related to the production of *ideas*. A new production center can be created - one that reinterprets the concept of a factory and transforms it to fit current and future needs and wants. This building becomes a new hub, or center, for the community - one that takes its roots in the past but grows and changes. Thus, ideas can be created on the site, and, just like the products before them, 'shipped' on the river to other places and people.





A cultural arts center with an emphasis on music is a program type deeply rooted in the production of *ideas*. Such a center would encourage users to be immersed in the story of the South Waterfront and in the story of music. This program type would foster a sense of community, a sense of place, and engage with existing building and landscape elements through interior/exterior performance and display spaces.



A music center encourages the idea of storytelling. Music is something quite magical that is produced and felt for a few moments in time, but can be remembered for a lifetime. It is ever-changing, ever-evolving, ever-inspiring. With a cultural music center, spaces can be created that tell this story of music, that capture the feeling and magic of music even when it is not being produced. Vacant spaces should capture memory and excitement of music, so that visitors feel like sound is always present and therefore feel and understand the story of the place. In this sense, architecture acts as a vessel to 'hold' the story. New design does not compete with existing conditions, but instead enhances them. They should possess a humble, informal quality that encourages a dialogue between old and new, between people and music.

*"Now we're all looking for something which gives us not so much power - because I don't think many people are nostalgic for power - and it's still a very dirty word - but perhaps a larger scope of what architecture could do, or could say."*

*- Koolhaas*

*Spatial Storytelling Requirements*

### *Outdoor Performance Space*

*what happens here:* gathering of community, music students, family, friends, teachers, patrons of music to perform, listen, enjoy, and celebrate music

*time of day:* this space should be available for use in the morning, all throughout the day, and at night as well

*people involved:* students and teachers, friends and family of all ages and backgrounds, janitors and maintenance crew

*size:* 3000 square feet

*juxtapositions:* needs to be adjacent to indoor lobby and restrooms; opportunity to relate to existing factory buildings as well

*type of light:* natural during day, artificial at night



### *Indoor Performance Space*

*what happens here:* gathering of community, music students, family, friends, teachers, patrons of music to perform, listen, enjoy, and celebrate music

*time of day:* this space should be available for use at all times of day and at night as well

*people involved:* students and teachers, friends and family of all ages and backgrounds, janitors and maintenance crew

*size:* 3000 square feet

*juxtapositions:* needs to be adjacent to lobby, restrooms, and lounge/cafe space

*type of light:* predominantly artificial; potential for some natural light





### Group Practice Facility

*what happens here:* students, members of the community, or visiting performers practice producing music together

*time of day:* this space should be available for use in the morning, all throughout the day, and at night as well

*people involved:* students and teachers, janitors and maintenance crew

*size:* 1000 square feet

*juxtapositions:* needs to be near indoor and outdoor performance spaces; potential to be visible to those in lobby or outside

*type of light:* natural and artificial



### Recording Studio

*what happens here:* students, musicians and teachers retreat to this space to produce and record music

*time of day:* this space should be available for use in the morning, all throughout the day, and at night as well

*people involved:* students and teachers, janitors and maintenance crew

*size:* 1000 square feet

*juxtapositions:* needs to be near practice facilities

*type of light:* artificial; opportunity to be buried in earth



### Artists' Residence

*what happens here:* musicians temporarily live in these spaces; this is their space of retreat when they are not teaching or producing music

*time of day:* this space should be available for use in the morning, all throughout the day, and at night as well

*people involved:* teachers and their guests

*size:* 3 at 500 square feet each

*juxtapositions:* somewhat separate from public spaces

*type of light:* natural and artificial



### Lounge/Cafe

*what happens here:* students, teachers, guests, friends, family, and members of the community reside in this space; it is a space of leisure, a break from work/production; it is a space of pause, waiting for a lesson to end or begin

*time of day:* this space should be available for use in the morning, all throughout the day, and in the evening as well

*people involved:* students, teachers, community members, family, friends, janitors and maintenance crew

*size:* 2000 square feet

*juxtapositions:* needs to be adjacent to practice facilities and performance spaces; opportunity for outdoor eating as well

*type of light:* natural and artificial



### *Sales/ Instrument Display*

*what happens here:* instruments and other musical gear are displayed, tested, bought, and sold in this space

*time of day:* this space should be available for use in the morning, and all throughout the day

*people involved:* students, teachers, community members, family, friends, store workers, janitors and maintenance crew

*size:* 1000 square feet

*juxtapositions:* needs to be adjacent to practice facilities and instrument repair; provide storefront to outdoor spaces

*type of light:* natural and artificial



### *Rooms for Private Lessons*

*what happens here:* students and teachers take part in daily and weekly lessons

*time of day:* this space should be available for use in the morning, and all throughout the day and evening

*people involved:* students, either as individuals or small groups, and teachers, janitors and maintenance crew

*size:* 5 at 750 square feet each

*juxtapositions:* need to be adjacent to lobby, cafe and lounge spaces, as well as near the restrooms

*type of light:* natural and artificial



### *Service Center for Instruments*

*what happens here:* instruments are brought in, repaired, and returned to owners

*time of day:* this space should be available for use in the morning, and all throughout the day and evening

*people involved:* repair people, instrument owners, interested passers-by, janitors and maintenance crew

*size:* 500 square feet

*juxtapositions:* needs to be near lobby and cafe/lounge

*type of light:* natural and artificial



### *Other Spaces to Include*

restrooms

mechanical rooms

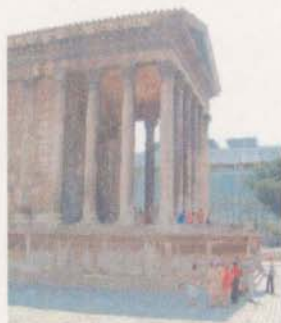
office

clerical spaces

circulation (30% of total area)

### *Total Square Footage:*

approximately 24000 square feet



*Precedent as Story*

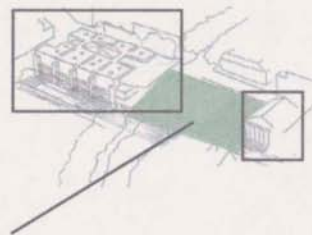




*"The result is provoking in its strength but also richly illuminating, as it shows off the old building not just as a monument but as a resource."*

*- Paul Spencer Byard*

Maison Carree and the Carree D'Art  
Norman Foster  
Nimes, France  
1991



The Carree D'Art tells the story of old informing new - of a series of ruins being just as applicable to every day life as a new modern art museum and large expansive courtyard. The scale of the Carree D'Art does not overtake the original Maison Carree, nor does it compete for importance on the overall site.

*Locating*



*"Every site is a unique intersection of land, climate, production, and circulation."*

*- Carol J. Burns*





*East Tennessee has a story to tell.*

It is an area rich in variety of scenery; one may venture short distances and see rolling, tree-covered hills, rocky cliffs jutting up from the glistening Tennessee River, the ever-active campus of The University of Tennessee and the revitalized, historical blocks of downtown Knoxville.



*South Knoxville has a story to tell.*

Its relationship to the college campus, the river, and downtown Knoxville, as well as its history of use makes it an inspiring area of study.



*The South Waterfront has a story to tell.*

Right now this zone, with its dilapidated factory buildings and humble homes, feels unappreciated; however, one can imagine that this waterfront, at one time, served as the catalyst for industry to prosper. One can feel the pressure of the surrounding hills pushing down towards the riverfront, creating a flat zone at the river edge for the production of goods to occur. One can imagine a residential community that prospered from this industry on the river's edge. Current plans to revitalize this area are promising insofar as re-activating the relationship between people and water, but the history and feel of this area may be lost in the process.



*A site has a story to tell.*

Located between two rather old and distinguished factory buildings (and a third larger, less distinguished factory building), this site currently serves as a make-shift parking lot for two of the buildings. Its terraced topography and, in some places, eroded concrete foundations, conjure up the ghost of a demolished building and use for the site. Its relationship to the waterfront has been lost by the growth of underbrush, barbed wire fences, and discarded machine parts.



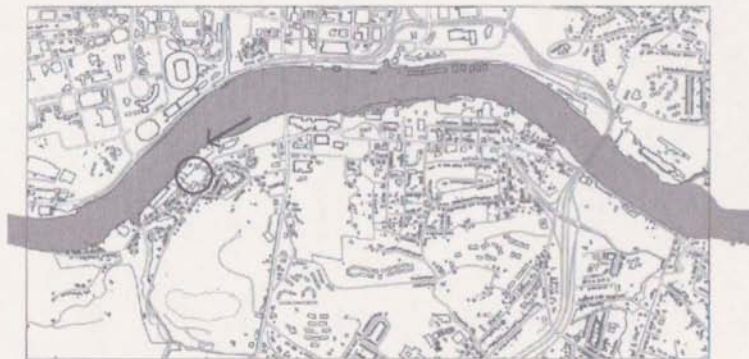


South Waterfront Residential Plan

According to the Knoxville South Waterfront plan, the zone along the water's edge, including this site, will be developed as high density residential in coming years. All industrial buildings are to be removed. Though a few have lost some of their integrity due to poor upkeep or cheap design solutions - such as painted over windows - these factories represent an element of the existing character of the waterfront along Blount Avenue. Storytelling involves developing a language to describe the past and present; this language itself becomes a fixed point in the ever-evolving story and future of an area. In this proposal, the two older factory buildings are to be saved from demolition and rehabilitated to fit future needs. In this way, the new cultural arts center, situated between these buildings, has the ability to capture the 'spirit of production' already present on the site, while at the same time relating to current and future needs of inhabitants.



view down The Tennessee River towards site



### *The Constancy of the River*

The Tennessee River is an ever-present force on the site. It activates every aspect of life along the water's edge, from commerce and culture to terrain and view. It separates campus activity from activity in South Knoxville, while creating wonderful opportunities for man-made connections. It is the force that transports ideas and products.





### *The Barrier-Force*

The natural topography of the hills south of the river's edge plays a distinct role in the feel of the site. Acting as a visual and physical boundary, this beautiful landscape 'pushes' inhabitable, buildable areas towards the water, where goods and ideas can be produced and then sent down the river.

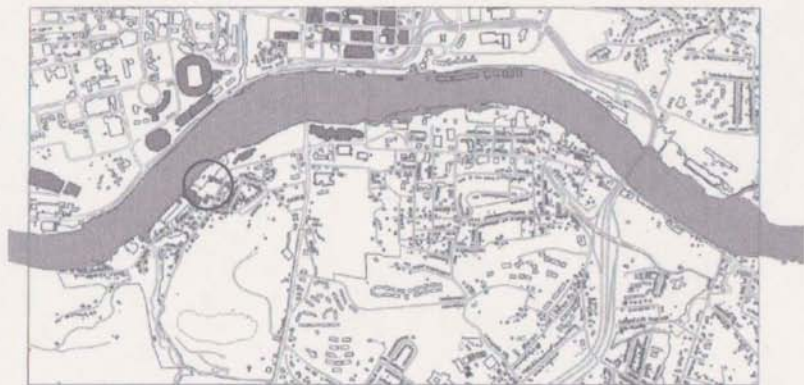


train running parallel to Blount Avenue



### *Evocative Sound*

The train is a force present on the site, both as a visual and a sound. The train reinforces the presence of industry and the transportation of goods and ideas. It serves as a link between edges of the river. Hearing the whistles and sounds of locomotion reminds one of a time when the significance of the train was felt and embraced by every inhabitant of the South Waterfront.



### *Buildings as Forces*

Buildings act as visual forces on the site. In terms of the built environment, the north side of the river is certainly more dominant. The south side of the waterfront possesses a humble quality that inspires storytelling.



panoramic of site, including the two factory buildings to be saved and rehabilitated



panoramic of buildings across street from site, from factory edge to factory edge

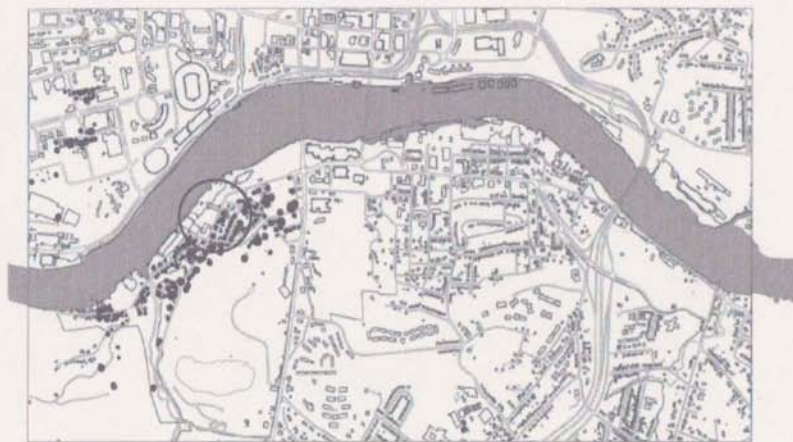
*"...to obliterate this area forever, which is currently the fate of the wall zone, would be to deny for future generations that this part of the history of the city ever existed."*

*- Sir Norman Foster, on Checkpoint Charlie*





homes across street, with hill beyond; all connected by one-story front porches that address the streetfront at a scale relative to the pedestrian



### *The Humble Force*

The residential areas surrounding the site represent a humble yet important force. These homes tell the story of the existing character along the waterfront. They speak of reverence to terrain and communal, neighborhood living.



smokestack on north side of the  
Tennessee River



goods produced, transported to water's edge, then move through water to  
destination

### *Industry as Inspiration*

Locating a project along the Knoxville South Waterfront means exploring the ways that an industrial zone and industrial concepts can be applied to current needs and desires of residents and visitors to the area. It means activating the river's edge, of creating places and spaces for a new kind of production that is then linked to the river and beyond. Just as the smokestack located on the north side of the water tells a story of use and serves as a visual marker and reminder, a project located in this industrial zone shall create a visual language, signaling to visitors and residents that a story lies waiting to be discovered, interpreted, and appreciated.





Sanborn Map, 1903



Sanborn Map, 1917

### *Visual History*

Sanborn Maps are storytelling devices, showing the cycle of development of roads, railroads, and factory buildings along the South Waterfront. With the river as the constant element, industry was developed on the river's edge and formed the hub for the future community of South Knoxville.



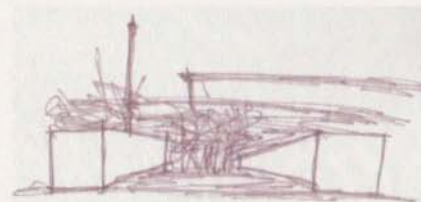
aerial photograph with poched reusable factory buildings

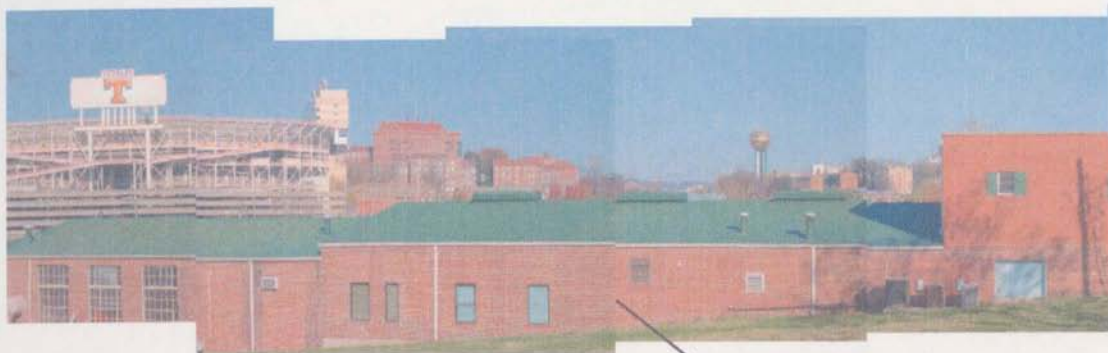


potential for 'addition' to the site to involve the overlap and connection between the past and present

*"The site as received is never cleared or empty; indeed it is not possible for the architect to clear the site of its own constituent formal content."*

- Carol J. Burns

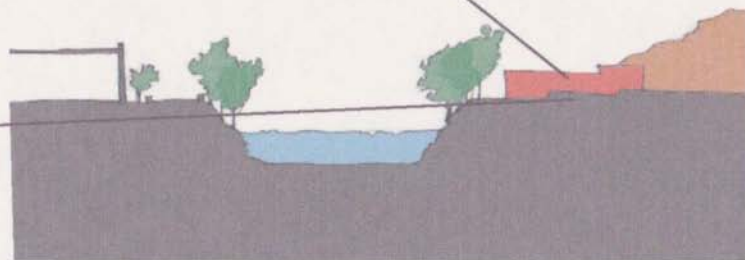




existing factory building to be reused



site for new building



site section through river



remnants from past uses



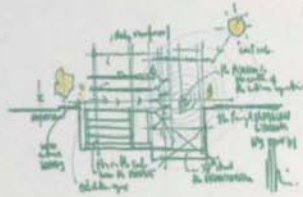
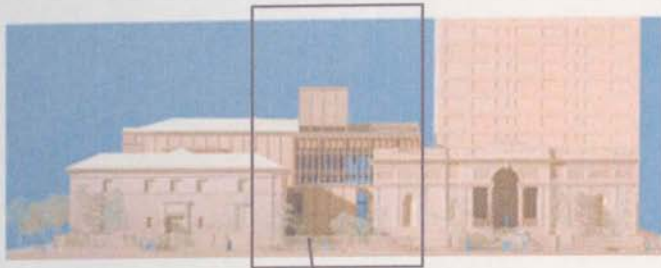
*"The site is a work, a human or social trace. It is comparable to a myth, temple, or city in that it is open to archeological deciphering."*

*- Carol J. Burns*

*Precedent as Story*







Renovation and Expansion  
of Morgan Library  
Renzo Piano  
New York City, New York  
2000-2006



The modern addition to the Morgan Library is a successful attempt to reunify existing components of a project. The new piece acts as an anchor point for the rest of the project, and the use of materials and natural light provides a complimentary contrast with the existing, older buildings. The addition tells the story of construction technology and ways to integrate new space with old space when the timeless treasures of books, knowledge, and research are involved.





future use



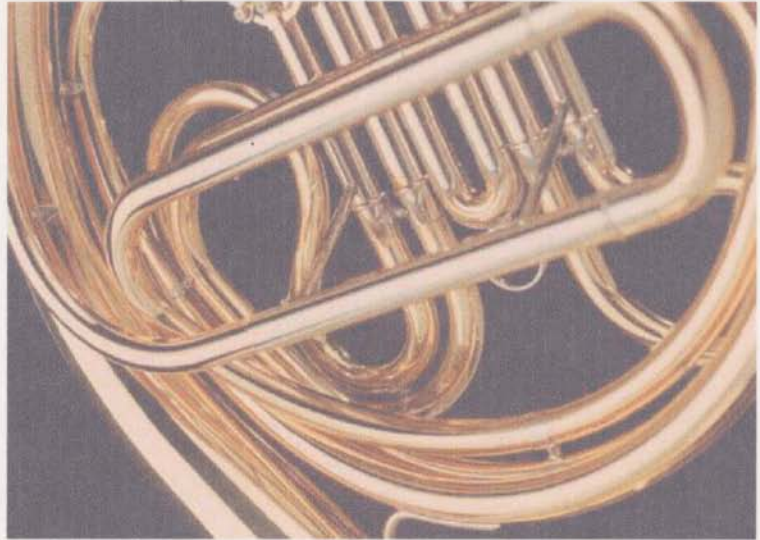
current zoning

At this time, the site is zoned as I-4, or heavy industrial district. This zone is intended for manufacturing and is not compatible with commercial, residential, or institutional uses. In the future, however, this could be transformed to a mixed use, high density residential zone.

*"Densities should be limited to provide adequate daylight, sunlight, air, and usable open space for dwellings and adequate space for all related facilities."*

*- Knoxville Codes, on High Density Residential*

*Forming*



*"Form follows function - that has been misunderstood. Form and function should be one, joined in a spiritual union."*

*- Frank Lloyd Wright*

Murcia Town Hall Extension  
Rafael Moneo  
Murcia, Spain



architecture as a platform

### *Form as the Story*

Translating the concept of storytelling into form involves a spatial language that reveres the past, fits present needs, and is adaptable to future use. The story of the site is always evolving, always growing, always changing. Likewise, the spaces that are created need to be able to grow and change to relate to conditions of the area. The form of the building constantly mediates between musician and music, between music and the community. Possible approaches to form include the creation of an outdoor space that serves as the 'bridge' between new and old architecture, between teacher and student, between visitor and music. In this sense, the outdoor performance space becomes the platform for exploring the story of music and the site.



original site of Benjamin Franklin's home  
Robert Venturi  
architecture as a frame



Hooper House  
Marcel Breuer  
Baltimore, Maryland  
1954-1955  
architecture as a system of layers

### *Layers of the Story*

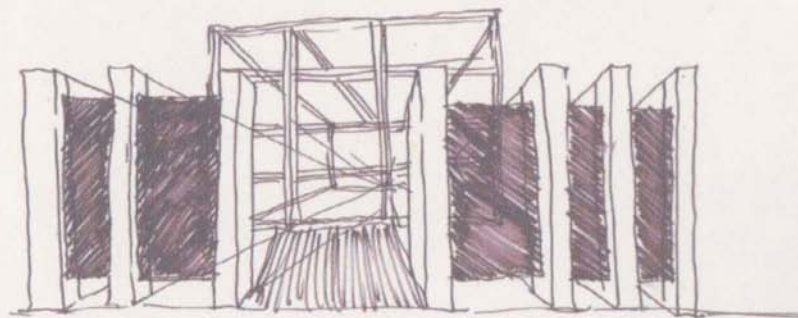
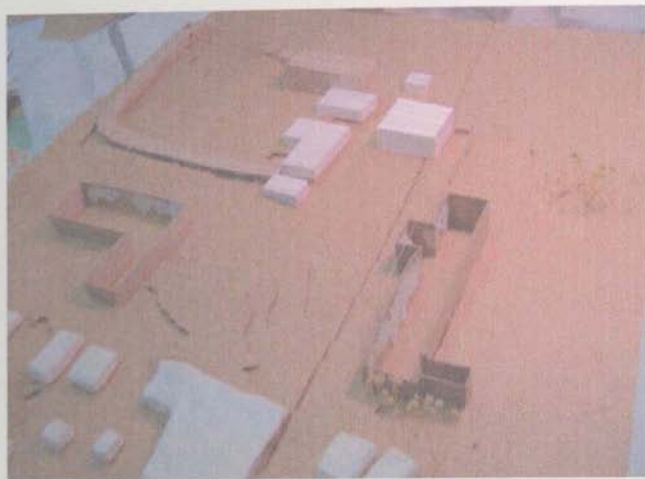
Another approach to form is the creation of layered spaces and planes - and thus the creation of a layered story. In this way, users and visitors would catch glimpses of other activities and functions relative to the production of music. The new architecture could also act as a frame for viewing existing elements of the site. This form then becomes part of the "new whole" described by Peter Zumthor - one is aware of the space inhabited, as well as how that space interacts with others and thus other layers of the story.





*Current design strategies and studies*





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Byard, Paul Spencer. *The Architecture of Additions*. New York: W.W. Norton and Company, 1998. pp 57-60.

Fentress, Curtis W. *Civic Builders*. Great Britain: Wiley Academy, 2002. pp 155-159.

"Knoxville South Waterfront: Creating an Actionable and Inspirational Vision" (revised November 7, 2006)

Sanborn Maps - Knoxville, Tennessee, 1903 and 1917

Stuth, Tricia - lecture

Trencher, Michael. *The Alvar Aalto Guide*. New York: Princeton Architectural Press, 1996. pp 152-154.

"Two Architects Ten Questions on Program" (answers by Rem Koolhaas and Bernard Tschumi; questions by Amanda Reeser Lawrence, Ana Miljacki, and Ashley Schafer)

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